

REMARKS

Claim status

Claims 1-29 were pending in the case at the time of the current Office Action. Claims 1-2, 4-8, 11-16, 18, 21-26, and 29 are currently amended herein. Claims 3, and 9-10 are cancelled herein. Claims 1-2, 4-8, and 11-29 are currently pending in the application.

Section 102 rejections

In the current Office action, claims 1, 11, 19-20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kay (U.S. 6,272,492).

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

Independent claim 1 recites a method to cache and redistribute streaming digital data content, said method comprising:

receiving a first content request, for a streaming content, from a requesting client machine, wherein said requesting client machine does not send information identifying a secondary server containing said streaming content corresponding to said first content request;

generating a second content request based on the first content request;

transmitting the second content request to at least one secondary server known to contain said streaming content;

receiving said streaming content from said at least one secondary server in response to said second content request; and

re-streaming, to the requesting client machine, the received streaming content as a content corresponding to the first content request and simultaneously caching the received streaming content locally such that the cached streaming content is directly available in response to a subsequent content request from a same or a different requesting client machine.

Independent claim 11 recites a system usable to cache and redistribute streaming digital data content, said system comprising a proxy server able to receive a first content request for a

streaming content from a requesting client machine, wherein said requesting client machine does not send information identifying a secondary server containing said streaming content corresponding to said first content request, and said proxy server able to generate and transmit a second content request to at least one secondary server known to contain said streaming content, and said proxy server able to receive the streaming content from said at least one secondary server in response to said second content request and re-stream, to the requesting client machine, the received streaming content as a content corresponding to the first content request and simultaneously cache the received streaming content locally at said proxy server such that the cached streaming content is directly available from said proxy server in response to a subsequent content request from a same or a different requesting client machine.

Independent claim 22 recites a system to cache and redistribute streaming digital data content, said system comprising:

means for receiving a first content request, for a streaming content, from a requesting client machine, wherein said requesting client machine does not send information identifying a secondary server containing said streaming content corresponding to said first content request;

means for generating a second content request based on said first content request and transmitting said second content request to at least one secondary server known to contain said streaming content;

means for receiving said streaming content in response to the second content request from said at least one secondary server; and

means for re-streaming, to the requesting client machine, and simultaneously locally caching the received streaming content as a content corresponding to the first content request such that the cached streaming content is directly available in response to a subsequent content request from a same or a different requesting client machine.

It is respectfully submitted that Kay (U.S. 6,272,492), hereinafter Kay, does not teach or suggest the claimed invention. In particular, Kay does not teach or suggest at least the streaming and simultaneously caching of a streaming content. In fact, Kay is not concerned with streaming content at all. Column 3 lines 65-67 of Kay states that content objects may include documents, graphics, and programs. There is no mention or suggestion of streaming content. Instead, Kay

describes a system and method for electronic communication, in which functional enhancements may be added that require no modification or replacement of the content-storing servers and is transparent to web browser software.

Streaming is a technique, known in the art, for transferring data such that it can be processed as a steady and continuous stream of data. Streaming technologies are becoming more important with the growth of the Internet because many users do not have fast enough access to download large multi-media files quickly. With streaming, the client can start displaying the data before the entire file has been transmitted. For streaming to work, the client side receiving the data must be able to collect the data and send it as a steady stream to the application that is processing the data and converting it to sound and/or pictures. Again, Kay is not concerned at all with the handling or caching of streaming content. The techniques used for the streaming and caching of streaming data content are very different from the techniques that are used for transmitting and caching static content such as single images, documents, and web pages. For example, a hint track may be provided for streaming content. The hint track tells a server exactly how to package the content to be streamed over a network. Each media stream should have its own hint track. The advantage of hint tracks is given by the fact that any server which understands hint tracks is able to serve any streaming content with hint tracks. When streaming content is cached, the hint track data is stripped off. In order to re-stream a streaming content to, for example, a requesting client, the hint track information must be rebuilt and applied to the streaming content before re-streaming. Caching of streaming content, in accordance with the claimed invention, allows bandwidth consumption to be minimized across expensive wide area network links or more saturated internal backbones. This may translate to a significant cost advantage over conventional delivery systems across a network infrastructure. Therefore, a system and method that are used to handle static content do not anticipate or render obvious a system and method that are used to handle streaming content.

Therefore, in view of at least the foregoing, it is respectfully submitted that claims 1, 11, and 22 are neither anticipated nor rendered obvious, and it is respectfully submitted that claims 1, 11, and 22 define allowable subject matter. Also, since claims 19-20 depend either directly or indirectly from claim 11, it is respectfully submitted that claims 19-20 define allowable subject matter as well. Applicants respectfully request that the rejections of claims 1, 11, 19-20, and 22 under 35 U.S.C. 102(e) be removed.

Section 103 rejections

In the current Office action, claims 2-5, 9, 12-17, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay, in view of Doyle (U.S. 6,678,793).

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

It is respectfully submitted that neither Kay nor Doyle (U.S. 6,678,793), hereinafter Doyle, nor the combination thereof teach or suggest the claimed invention of claims 1, 11, and 22. In particular, neither Kay, Doyle, nor the combination thereof teach or suggest at least the streaming and simultaneous caching of a streaming content. As described previously herein, Kay is not concerned at all with streaming content. Also, Doyle is not concerned at all with streaming content. Instead, Doyle is concerned with the caching of static data, not streaming content.

Therefore, in view of at least the foregoing, it is respectfully submitted that claims 1, 11, and 22 are neither anticipated nor rendered obvious, and it is respectfully submitted that claims 1, 11, and 22 define allowable subject matter. Also, since claims 2-5, 9, 12-17, and 23-26 depend either directly or indirectly from claims 1, 11, or 22, or are cancelled, it is respectfully submitted that claims 2, 4-5, 12-17, and 23-26 define allowable subject matter as well. Applicants respectfully request that the rejections of claims 2-5, 9, 12-17, and 23-26 under 35 U.S.C. 103(a) be removed.

In the current Office action, claims 8, 21, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay, in view of Shannon (U.S. 6,233,618).

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

It is respectfully submitted that neither Kay nor Shannon (U.S. 6,233,618), hereinafter Shannon, nor the combination thereof teach or suggest the claimed invention of claims 1, 11, and

22. In particular, neither Kay, Shannon, nor the combination thereof teach or suggest at least the streaming and simultaneous caching of a streaming content. As described previously herein, Kay is not concerned at all with streaming content, and Shannon is directed to providing access control and restricting client requests.

Therefore, in view of at least the foregoing, it is respectfully submitted that claims 1, 11, and 22 are neither anticipated nor rendered obvious, and it is respectfully submitted that claims 1, 11, and 22 define allowable subject matter. Also, since claims 8, 21, and 27-29 depend either directly or indirectly from claims 1, 11, or 22, it is respectfully submitted that claims 8, 21, and 27-29 define allowable subject matter as well. Applicants respectfully request that the rejections of claims 8, 21, and 27-29 under 35 U.S.C. 103(a) be removed.

In the current Office action, claims 6-7, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay, in view of Doyle and Shannon.

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

It is respectfully submitted that neither Kay, Doyle, Shannon (U.S. 6,233,618), nor the combination thereof teach or suggest the claimed invention of claims 1, 11, and 22. In particular, neither Kay, Doyle, Shannon, nor the combination thereof teach or suggest at least the streaming and simultaneous caching of a streaming content. As described previously herein, Kay and Doyle are not concerned at all with streaming content, and Doyle is directed to providing access control and restricting client requests.

Therefore, in view of at least the foregoing, it is respectfully submitted that claims 1, 11, and 22 are neither anticipated nor rendered obvious, and it is respectfully submitted that claims 1, 11, and 22 define allowable subject matter. Also, since claims 6-7, 10, and 18 depend either directly or indirectly from claims 1, 11, or 22, it is respectfully submitted that claims 6-7, 10, and 18 define allowable subject matter as well. Applicants respectfully request that the rejections of claims 6-7, 10, and 18 under 35 U.S.C. 103(a) be removed.

Accordingly, the applicants respectfully requests reconsideration of the rejections based at least on the arguments made above. After such reconsideration, it is urged that allowance of all pending claims will be in order.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'D. J. Muzilla', written in a cursive style.

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